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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,839	06/20/2006	Akiyasu Nozue	080306.56872US	4231

23911 7590 02/11/2009

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EXAMINER	
DIAZ, THOMAS C	
ART UNIT	**PAPER NUMBER**
3656	

MAIL DATE	DELIVERY MODE
02/11/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/551,839	NOZUE ET AL.	
	Examiner	Art Unit	
	THOMAS DIAZ	3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) *5 and 6* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-6* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 October 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of claims

This office action is in response to the reply filed on 12/11/2008. The examiner appreciates and acknowledges applicant's response.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, claim 4 recites “said pin fit-in hole in which said another knock pin … is fitted”. The term “said pin fit-in hole” lacks antecedent basis since it is for a different knock pin than the pin fit-in hole mentioned in claim 1. Perhaps changing "said" to "a" or "another" would fix the problem.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (JP0926800A; Using machine translation) in view of Maezawa et al. (JP 2000-336696).

Applicant claims a swing mechanism (fig.1, 3) comprising:

Regarding claim 1,

- A swing frame (fig.1 or 2, element 4),
- An inner race (fig.2, 6) having an internal gear (fig.2, 6a) on an inner circumferential portion thereof and mounted on a side of an undercarriage (see fig.1)
- An outer race (fig.2, 7) rotatably arranged surrounding said inner race and provided with said swing frame mounted thereon (see fig.2),
- A pinion (fig.2, 12) inserted through a pinion insertion hole (not labeled but clearly seen in fig.2; hole in swing frame through which pinion protrudes) formed in said swing frame and maintained in meshing engagement with said internal gear,
- A pinion drive device (fig.2, 11) for rotationally driving said pinion,

Yamamoto et al. discloses an outer race attached to the swing frame but is silent to how it is attached. In particular, Yamamoto et al. fails to disclose a knock pin fixed on said outer race is fitted in said pin fit-in hole to position said swing frame and a pin fit-in hole portion through which said pin fit-in hole is formed is arranged on said swing frame at a location in a vicinity of a place of meshing engagement between said pinion and said internal gear such that said pin fit-in hole portion extends toward said pinion

insertion hole, and said pin fit-in hole is located on or in a vicinity of a line that extends through a center of rotation of said outer race and a center of rotation of said pinion.

Maezawa et al. teaches the use of a pin fit-in hole (fig.4, 15) arranged in a swing frame (fig.4, 5) such that a knock pin (fig.4, 13) fixed on said outer race is fitted in said pin fit-in hole and a pin fit-in hole portion (see fig.4, general area of the pin fit-in hole) through which said pin fit-in hole is formed is arranged on said swing frame at a location in a vicinity of a place of meshing engagement between said pinion and said internal gear (fig.4, shows it's in a vicinity of the gearing) such that said pin fit-in hole portion extends toward said pinion insertion hole (fig.4; shows the portion extends toward the pinion insertion hole which is located below it and also to the right of it.) and said pin fit-in hole is located on or in a vicinity of a line that extends through a center of rotation of said outer race and center of rotation of said pinion (see fig.1 and 4, clearly the pin fit in hole is located is in the vicinity of an imaginary line that extends through a center of rotation of said outer race) for the purpose of positioning said frame and outer race. The use of one known connection in substitution for another known connection would be obvious to one of ordinary skill in the art. Additionally, the connection taught by Maezawa et al. would yield the same predictable results of providing a removable attachment or connection for the outer race and swing frame.

It would have been obvious to modify the connection of the outer race to the swing frame disclosed by Yamamoto et al. with the pin fit-in hole (fig.4, 15) arranged in a swing frame (fig.4, 5) such that a knock pin (fig.4, 13) fixed on said outer race is fitted in said pin fit-in hole, as taught by Maezawa et la., for the purpose of positioning said

frame and outer race. The use of one known connection in substitution for another known connection would be obvious to one of ordinary skill in the art. Additionally, the connection taught by Maezawa et al. would yield the same predictable results of providing a removable attachment or connection for the outer race and swing frame.

Regarding claim 2,

Yamamoto discloses another knock pin (fig.10Y, 18) is arranged between said swing frame and said pinion drive device (seen in fig.2 and 10X; the knock pin extends through the area that lies between the swing frame and the pinion drive device).

Yamamoto et al. and Meazawa et al. disclose a center of said knock pin for positioning said swing frame being fitted in pin fit in hole (fig.1 and 4 of Maezawa et al.) and a center of a knock pin for positioning said pinion drive device (fig.10Y, 18; Yamamoto etal.) are each located on or in a vicinity of a line that extends through said center of rotation of said outer race and said center of rotation of said pinion (both pins would be located in the vicinity of the line).

Regarding claim 3,

Meazawa et al. discloses said pin fit-in hole is arranged in a center frame (see fig.4 is in center frame 5) of said swing frame.

Regarding claim 4,

Yamamoto et al. discloses a pin fit-in hole (fig.10Y, 17e) in which said another knock pin for positioning said pinion drive device is fitted is arranged through a flange potion of said pinion drive device (fig.10Y, 13a is the flange portion of pinion drive

device) and a bracket for mounting said pinion drive device (fig.10Y, 16; examiner interprets the spacer from the translation to be a bracket).

Response to Arguments

1. Applicant's arguments filed 12/11/2008 have been fully considered but they are not persuasive. Applicant argues “there is no description or suggestion in Yamamoto et al. of a pin fit-in hole portion as claimed". As broadly recited in claim 1, it is clear from the rejection stated above that Yamamoto et al. indeed has a pin fit-in hole portion. Since the applicant does not explicitly point out or discuss how Yamamoto et al. fails to disclose this pin fit-in hole portion as claimed, then the rejection will be maintained. Assuming the arguments are on the basis of the location of the pin fit-in hole, then as broadly recited the claim requires for the pin fit-in hole to be at a location in “**a vicinity** of a place of meshing engagement…” and also “in **a vicinity** of a line that extends through a center of rotation…” As explained in the above rejection, Yamamoto et al. discloses these claimed features. Furthermore, the term "vicinity" does not give any discrete measure of distance and thus it is the examiner’s view that Yamamoto et al. indeed reads on the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS DIAZ whose telephone number is (571)270-5461. The examiner can normally be reached on Monday-Friday 8:30am to 5:30pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Thomas Diaz/
Examiner, Art Unit 3656

/Richard WL Ridley/

Supervisory Patent Examiner, Art Unit 3656